

**LETTERS FROM GRANDPA**  
**#255**

Dearest grandchild,

Today's letter will deal with the Peacock Mantis Shrimp. It is one of the most interesting and complicated creatures that God has created. A simple Google search will confirm the following information. There are over 400 different species of mantis shrimp but in this letter we will deal with only one. Though this brightly colored shrimp is only from 2 to 7 inches long it is one of the strongest animals in the world for its size. In spite of being small it is a deadly predator that can easily break the shell of a clam and eat it. God has equipped it with deadly clubs that are spring loaded like a crossbow. When released, these clubs have the force of a .22 caliber gun and can hit with 330 pounds of pressure. This is 2,500 times the shrimp's own weight. On the surface these clubs are covered with hydroxyapatite, a hard crystalline calcium-phosphate ceramic material. Beneath the surface are layers of elastic polysaccharide chitin which act as shock absorbers. The strikes come in less than 800 microseconds which means that theoretically they can punch 50 times in the blink of an eye. When attacking with such speed the water around the attack is briefly super heated. These cavitation bubbles can reach temperatures of 4,400 c. When captured these unusual creatures must be kept in shatter proof tanks as they can easily break glass.

The Peacock Mantis Shrimp is a killing machine with amazing eyesight. It has perhaps the most complex eyes in the animal kingdom. Their eyes contain millions of light sensitive cells with 16 color-receptive cones (humans have only 3). This means that this tiny shrimp can detect ten times more color than a human, including ultraviolet light. Its eyes are on stalks that can move around independently, enabling the shrimp to see in different directions at the same time. This gives it an advantage in searching for both predator and prey. They have the broadest visual spectrum of any known animal. Researchers from the University of Queensland believe that their compound eyes can achieve early detection of cancer lesions because they have the ability to detect polarized light that reflects differently from cancerous tissue as compared with healthy tissue. Scientists are studying their eyes with the hope that they can copy this technology and build small cameras to detect cancer cells at a very early stage.

Centuries before Christ Job wrote: **“But ask the animals, and they will teach you, or the birds of the air and they will tell you; or speak to the earth and it will teach you or let the fish of the sea inform you. Which of all these does not know that the hand of the Lord has done this?” (Job 12:7-10).** Throughout history science has learned a great many things from creatures created by God. Perhaps we can also learn something from this amazing shrimp.

Michele Debczak points out in the Sept. 22, 2016 issue of Mental Floss: *“In addition to the all epic abilities listed above, mantis shrimp are one of the only creatures capable of seeing polarized light. This has allowed them to develop a secret code that's undetectable to other species. The Haptosquilla trispinosa species of mantis shrimp wields feathery feeding appendages called maxillipeds that are marked with iridescent, blue spots. The cells of these features reflect light in a unique way. Instead of bouncing light into a reflective structure like the polarizing cells developed by humans, the cells distribute light across the spot's surface. The brilliant light is plainly visible to other mantis shrimp, allowing them to signal members of their species while staying hidden from predators.”*

Truly: **“The fool has said in his heart, ‘there is no God’” (Ps. 14:1).** The Peacock Mantis Shrimp did not develop by accident but was obviously created by God and so are we!

While we are dazzled by the abilities of such lower creatures, we must remember that only man is created in the image of God (Gen. 1:27). The heavens declare His glory (Ps. 19:1), but only man reflects His image. Man not only has the ability to “subdue” and “rule over” animals, birds, and fish, he also has the ability to love and protect animals, birds, and fish. The Bible is the only book where the hero dies so the villain can live. Remember! God is love (1 Jn. 4:16), and that we are created in His image. Jesus Christ deliberately divested Himself of Deity and came to earth as a little baby. He came with love not power. This is clear from Phil. 2:5-11 as well as many other passages of Scripture. God did not send Jesus into the world to condemn the world, but that the world through Him might be saved (Jn. 3:17). When Peter tried to protect Jesus with a sword, Jesus rebuked him and said: **“Put your sword back in its place . . . for all who draw the sword will die by the sword. Do you think I cannot call on my Father and he will; at once put at my disposal more than twelve legions of angels? But how then would the Scriptures be fulfilled that say it must be this way?”** (Matt. 26:52-54).

There is a dramatic difference between animals who kill others to survive, and Jesus who deliberately died that others might live. Remember! We are created in the image of God, not of the Peacock Mantis Shrimp.

I love you,

Grandpa Boyce